

INTERNATIONAL SEARCH REPORT

Internal Location No
PCT/IB 03/05408

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H03F1/30 H03F1/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H03F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X, L	WO 03 034586 A (KONINKL PHILIPS ELECTRONICS NV) 24 April 2003 (2003-04-24) page 1, line 1 -page 10, line 12; figures 1,2	1-5,7-9
X	US 6 043 714 A (MIYAZAKI YUKIO ET AL) 28 March 2000 (2000-03-28) column 11, line 40 -column 12, line 22; figure 5	1,7-9
X	US 2002/024390 A1 (OHBU ISAO ET AL) 28 February 2002 (2002-02-28) paragraphs '0028!', '0033!; figures 1,8	1,2,6-9
X	US 2002/171483 A1 (SUEMATSU NORIHARU ET AL) 21 November 2002 (2002-11-21) paragraphs '0002!', '0048!-'0055!; figure 3	1,2,5,8,9
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

9 March 2004

Date of mailing of the international search report

16/03/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 271 695 B1 (GRAMEGNA GIUSEPPE ET AL) 7 August 2001 (2001-08-07) column 4, line 21 -column 5, line 8; figure 5	1,6,8,9
A	GB 2 186 141 A (PLESSEY CO PLC) 5 August 1987 (1987-08-05) figure 3	6

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 Internati ication No
 PCT/IB 03/05408

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 03034586	A	24-04-2003	WO 03034586 A1	24-04-2003
			US 2003087626 A1	08-05-2003
US 6043714	A	28-03-2000	JP 11163640 A	18-06-1999
			DE 19821735 A1	02-06-1999
US 2002024390	A1	28-02-2002	JP 2002076791 A	15-03-2002
			CN 1436398 T	13-08-2003
			EP 1315289 A1	28-05-2003
			WO 0219519 A1	07-03-2002
US 2002171483	A1	21-11-2002	WO 0203544 A1	10-01-2002
			EP 1296447 A1	26-03-2003
			WO 0203545 A1	10-01-2002
US 6271695	B1	07-08-2001	IT VA990010 A1	30-10-2000
GB 2186141	A	05-08-1987	JP 62253203 A	05-11-1987
			NL 8700234 A	17-08-1987